STENNIS SPACE CENTER HISTORY PROJECT

THE MISSISSIPPI ORAL HISTORY PROGRAM

AN ORAL HISTORY

with

Captain William C. Fortune

Interviewer: Charles Bolton

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The University of Southern Mississippi

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An Oral History with Captain William C. Fortune, Volume 649

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Biography

William C. Fortune was born March 1, 1911, in Salamanca, New York, on a Seneca Indian reservation, to Archibald William Fortune (a high school principal at the time) and Amy Hardendorf Fortune (a teacher). His father was later to become a Superintendent of Schools and his mother Town Clerk of Morristown, NY. Capt. Fortune graduated as valedictorian in 1929 from Messina High School and received a score of 100 in geometry on the New York Regents High School Exam. He was nominated to the U.S. Naval Academy by Congressman Bertram Snell of New York (Republican). While at the U.S. Naval Academy in Annapolis, MD, he earned an "N" in soccer, "NA" in boxing and gym and graduated in the top 25% of his class. As an ensign he served aboard the *Texas* for two and a half years. After flight training at Pensacola, FL, 1936-37, he was assigned to squadrons aboard the USS *Saratoga*, *Ranger* and *San Francisco*. He attended graduate school and was awarded an M.S. in aeronautical engineering from M.I.T. in 1942.

He served on Staffs of Commander Fleet Air, Japan, during the Korean incident; awarded Commendation Medal and ribbon both theaters. He was chief engineer at the Naval Aircraft Factory, 1946-48, and had various research and assignments including Bureau of Aeronautics Representative, Pasadena, CA; Aerodynamics Laboratory, David Taylor Model Basin; Air Branch, Office of Naval Research, BUAER General representative, Western District; Component Development Officer (directing Power Plants, Avionics and Airborne Equipment Division) in BUAER in Washington, D.C. He reported to the U.S. Naval Air Test Facility (ship installations) at NAS Lakehurst, NJ, in July, 1959, as commanding officer, serving until September 12, 1962. He was one of the few senior aeronautical engineering officers qualified in jet aircraft and held a commercial pilot's license with instrument rating. Although he has had mid-air collisions, bailed out, been in forced landings, fired at and flown through a cable trap over Korea, he says he was more worried on a free-balloon flight that had valve trouble and came down hard near Lakehurst, NJ. He does not advocate flying in a wicker basket.

From his Lakehurst assignment, Capt. Fortune was personally requested by Werner von Braun to build the test site for the Apollo moon rockets. He first went to Huntsville, AL, to work with Dr. von Braun and NASA associates before moving to Mississippi in 1963 to develop the test site in Hancock County. The test site was developed out of a wilderness area and eliminated two towns. Today, the test site is known as Stennis Center.

Capt. Fortune moved to Palos Verdes Estates, CA, in 1965 and retired in 1972 from NASA. His wife of almost 60 years, Elizabeth ("Libby") Offutt Fortune of Bethesda, MD, died on January 9, 1995. His daughter Amy Elaine Fortune Valkass died in 1979. His other two daughters, Wealtha Fortune Weaver and Laurie Fortune Jaffe, who live in California, both graduated from the University of Southern Mississippi. His granddaughter, Sande Lea Weaver, is currently an accounting senior at Southern and plans to attend graduate school at USM.

Among societies and memberships held, honors and publications include: NASA 40 Year Service Award Certificate; NASA Apollo Achievement Award; George C. Marshall Space Flight

Center (NASA); Associate Fellow in the Institute of Aerospace Science; American Rocket Society, Director of So. California Section and charter member of first board of directors; NASA, George C. Marshall Space Flight Center in Recognition of Contribution to Technology Utilization Program; Technology Utilization Award, Outstanding Achievement; 25 Years American Institute of Aeronautics and Astronautics, in Appreciation for Sustained Contributions since 1947; NATO Committees; U.S. Pacific Fleet Flagship of the Commander in Chief; Jet Training Certification; National Council, Mason and Shriner; NACA and AGARD Committees; authored various articles in Technical Journals on Aerodynamics, Propulsion, Engineering, Careers in Civil Service, VTOL, Launching and Arresting Devices, Material Reliability, etc. Among other honors received include: Navy League of Jersey Shore Council, Palos Verdes Estates, and National Navy League; many citations from governors and senators of the state of Mississippi, coordinator of the State of Mississippi Research and Development Council, 1964-1968; Pass Christian Chamber of Commerce; citations and certifications from the secretary of the Navy and Department of the Navy; and NASA commendations from Wernher von Braun.

AN ORAL HISTORY

with

CAPTAIN WILLIAM FORTUNE

This is an interview for the Stennis Space Center History Project in conjunction with the Mississippi Oral History Program. The interview is being conducted with Captain William Fortune by telephone. Captain Fortune currently lives in California. The date is September 16, 1993, and the interviewer is Charles Bolton, program director.

Bolton: OK, the first question. I just wanted to ask you when and where you were born?

Fortune: Well, I was born in Salamanca, New York, on a Cattaraugus Indian reservation [on March 1, 1911].

Bolton: Oh, really?

Fortune: Which is why I always say I can see so far.

Bolton: Why were you born on an Indian reservation?

Fortune: In 1911, March 1.

Bolton: OK. Why were you born on an Indian reservation?

Fortune: My mother was teaching school there in Salamanca and that was on the Cattaraugus Indian reservation. [My father was the high school principal and then superintendent of schools. My aunt, Mrs. T.S. Bell was commissioner of Indian Affairs.]

Bolton: OK. I know that you—

Fortune: A Seneca reservation by the way, one of the Seneca tribes.

Bolton: OK. I know that you eventually became a pilot and got—

Fortune: After initial three years aboard the *Texas*—I became an honorary son of Texas by the way by serving aboard the U.S.S. *Texas*, from graduation [from the Naval Academy] to going to Pensacola [for flight training].

Bolton: OK. Were you interested in flying when you were a kid? Had you always been fascinated with flying, or how did you get interested in that?

Fortune: I had an uncle in World War I who always kept trying to get me flying. He took me flying early, before I ever went to the Naval Academy.

Bolton: OK. So you went to the Naval Academy then?

Fortune: I went to the Naval Academy in 1929 and graduated in 1933. I was assigned to the U.S.S. *Texas* as a junior deck officer, served in [aircraft gunnery observation] battle control, and damage control, all the different departments.

OK. I was married, by the way, before—[the Navy wouldn't let Naval Academy graduates get] married for the first two years [after graduation]. That was during the Depression. Well, as soon as I could, I got married on June 7 of 1930, let's see, 193—when were we married, Lib?

Mrs. Weaver: June 7, 1935.

Fortune: Married June 7, 1935.

Bolton: She's going to get you for not remembering that. What kind of planes would you be flying back in the '30s?

Fortune: When I started out, I was a naval gunnery observer in an old 02-U, an observation plane. I was observing the gunnery practices [and how far they were off target]. That was about after a year or so. And then I really wanted to fly and went to Pensacola. And in two and a half or three years, took about a year in Pensacola, and then was assigned to a VS squadron, a Victor-S, a long range spotting for the ships. [I also flew dive bombers and over the years, each new airplane as it was made and used, including jet aircraft.]

Bolton: Well, about the time you got your wings would be, I guess, World War II was just on the horizon. What were you doing during the war?

Fortune: I was actually flying from '35 until '39. I was assigned back to the Navy post graduate school in Annapolis. And after two years in a post graduate school at Annapolis, then I was assigned to MIT [Massachusetts Institute of Technology] for the subsequent scholastic year. [After graduating with an MS in aeronautical engineering,] from MIT, I was directly assigned to the naval aircraft factory, Philadelphia.

Bolton: And that was where they were building naval aircraft?

Fortune: We were building aircraft trainers and equipping all the carrier airplanes with hooks for catapulting and tailhooks for arresting. Catapult hooks for catapulting and tailhooks for arresting gear.

Bolton: And this would have been during World War II, right?

Fortune: Oh, yes, it was right just about the beginning.

Bolton: So, the pace must have been hectic, I imagine.

Fortune: We not only tested all Navy aircraft, including seaplanes and land planes, but Army and Air Force. At the time, of course, it was just Army and then the Army Air Corps and then the Air Force. Whenever those other services wanted to go to be launched, to go in fighting—in other words, we could launch them from the deck of a carrier with the catapult. And I had to train in Philadelphia to get them used to catapulting before we would let them go out on the carriers to be launched.

Bolton: Did you stay there for most of the war? Is that where you were located throughout World War II?

Fortune: I'm trying to think where we went from Philadelphia. No, I came out to ComAirPac, was assigned to the Commander Air Forces Pacific fleet in Pearl Harbor, on Ford Island in Pearl Harbor. And I spent two years and a half there, checking all the carriers, making sure they were properly tested before going out to combat, or I had to repair those that were shot up or worn out or damaged and so on.

Bolton: So you had a lot of experience in the testing aspect of—

Fortune: Yes, I did, a great deal. From that I went back to Philadelphia. I continued more of it. I got an excellent fitness report from the fleet for all my work at Ford Island, and then I kept on. I was assigned to the staffs of ComAirPac again, testing and continuing checking everything with the fleet again. So I alternated, really, between Philadelphia and mostly in the different fleet jobs for about several years. Then I was taken out to the Pacific to work for Admiral Pearson, who had been my boss in Philadelphia the last year or two. And I went with him to Commander Air Forces Pacific fleet. Then I worked with all the different aircraft suppliers, providers aircraft companies. Then at San Diego and down here in Santa Monica, all around the West Coast.

Bolton: Right. A lot of them were located on the West Coast then.

Fortune: And then I had a Naval Air Test Facility, Lakehurst — not the lighter-than-air, but we closed out — we took over from the LTA, the lighter-than-air, the "poopey packers" as we called them.

Bolton: This was in New Jersey? Lakehurst in New Jersey?

Fortune: Right. And we became the primary test facility for new aircraft, new planes, new devices and so forth. And it was there that—when [Wernher] von Braun came to the states, as I say, I had met him as a member of the state department team to go over and advise the Germans on what they could do for military research and development.

Bolton: And this is after the war?

Fortune: Yes.

Bolton: OK.

Fortune: When the treaty of—let's see, how many years was the Treaty of Ghent after World War II? I think it was seven years after the war.

Bolton: OK.

Fortune: The Treaty of Ghent expired. I went as a representative of the aircraft side of the Navy, and [another] man from [N.O.T.S. (Naval Ordinance Test Station)], the chief scientist from N.O.T.S., advised them on all the gunnery and explosives techniques.

Bolton: This is still when von Braun is in Germany, right?

Fortune: Yes, that's when I met him over there the first time.

Bolton: What was your first impression of him? What did you think of Braun the first time you met him?

Fortune: Really, he seemed fairly quiet. He hadn't been happy with the Nazis; I could tell that right away. He didn't like the way that things had been going, and he was straining to get away from restrictions and military limitations. It wasn't until after I had worked with him as a manager—I managed the naval air—let me see now, what did I do for von Braun? I went to—where was von Braun? I'm trying to think.

Bolton: I don't know if this—but I read somewhere that you were with the Navy when they were doing the shipboard launches of the V-2 rockets just after the war.

Fortune: Oh, that's right I did that, too. I designed the launch equipment for the V-2. I guess that's probably the first time I had really been closer to von Braun.

Bolton: That was in '47, from what I've read.

Fortune: Yes. And when I went to work with him, directly, I was always impressed. He had about thirty different managers. I managed the design and construction of the Mississippi Test Facility for moon rockets. And he would call us around every two to four weeks, get all the thirty managers in. He would very succinctly outline the problems that we were facing each week in the different sections and areas of his command. Then, he would ask each of the managers, "Well, now what would you recommend for these problems?" And he would then sound off each one. Most of it, I would keep my mouth shut except to tell him what the problems were in the launching and the rockets problems.

Bolton: So, were you still with the Navy when you working with von Braun?

Fortune: I was told I could consider myself on loan to von Braun.

Bolton: OK. So you were with the Navy, but you were part of his team that was trying to develop the rocket program.

Fortune: Right.

Bolton: OK.

Fortune: In fact, he even wrote my fitness reports. I got some very nice ones from him. Then after each manager had said what they would do in their particular forté he would say, "Well, that's fine. You've contributed greatly now. Now here's the way we're going to do it." (laughter)

Bolton: (laughter) He had his own ideas in other words.

Fortune: He'd come up with far better solutions than a lot of the people in the field did. He had a real beautiful way of analyzing.

Bolton: Who were some of the other people on that team that you worked with that you remember?

Fortune: Heimburg was in charge of testing, per se, right at Huntsville. And I worked closely with him, down trying to learn as much of their ideas of testing and so forth as I could. And I've got to go back. I should have done this, and I meant to tell you the outstanding Germans that I met. And they were a wonderful crowd.

Bolton: How did, for instance, Heimburg differ from von Braun? Was there a difference there?

Fortune: Well, Wernher had a way of summarizing the different suggestions made. Heimburg would say, "Now, we'll do it this way, my way." He was a hard-headed German tester. There's no question about it: he was brilliant, but he wasn't always right. But as far as I know von Braun was never wrong. (laughter) It was a very enlightening experience.

Bolton: So, did you eventually go to Huntsville to work because the team was based in Huntsville—is that right?—at this time?

Fortune: Yes, right. Yes, I spent quite a bit of time in Huntsville and then at their different locations.

Bolton: OK. How did it come to be that you were chosen as the manager for the Mississippi Test Facility?

Fortune: Oh, he came to visit me in Lakehurst one time. He said, "Bill, you've got the same problems facing you. We're in a remote area. The people around here are in the boondocks, out in the woods, so to speak, many of whom have never been three miles or more from home. They have to be brought up and educated to what we're doing. They've got to be shown that what we're doing is not hazardous, it's not dangerous, but it is necessary for us to get to the moon." One old lady said, "Well, why do you want to spend all your time dashing madly around the country? Why don't you just sit home and watch television?"

Bolton: This is somebody in Mississippi said that?

Fortune: Some old lady in—well, first I heard it down in Huntsville.Bolton: Oh, OK.

Fortune: And then I heard it at Lakehurst, somebody else. They'd always come out, "Well, why do you want to do this? Why should we go to the moon? Why can't we just sit here and watch it on TV?" And he would very patiently explain, "Well now, you won't see it on television until we have perfected it, until we've been able to do so. And we have to get there in order to expand the man's knowledge of the cosmos, of the universe, and to go on to more heavenly targets or heavenly areas." And he could explain to a six-year-old kid or a sixty-year-old lady and convince them. He was a real super salesman.

Bolton: Did he have the idea that eventually that the testing of rockets was going to lead to exploration in space? I mean the American government didn't necessarily come around to that idea until the late '50s, but he had this idea much earlier, didn't he?

Fortune: Oh, the Germans had that at Peenemünde [Experimental Center] all along.

Bolton: OK.

Fortune: He brought many of his Peenemünde group with him. And that was in the back of their purposes and thoughts.

Bolton: Do you think that the rocket program could have been ever completed without that expertise from the German scientists, or would it have been slowed down?

Fortune: Well, I had my own rockets when I was in the Office of Naval Research. We'd had nothing that size.

Bolton: So, the Germans were a little bit ahead of the Americans.

Fortune: The Germans were ahead of us in large-size rockets. I launched the Aerobe, for example, from a seaplane tender, working with Point McGoo. And I worked with Point McGoo on several other projects, NAMC, the Naval Air Missile Center—the Naval Air Missile Test Center—NAMTC, I guess it's called, and worked with them all along. I had been interested in—I had met Dr. [Robert H.] Goddard, one of our foremost U.S. scientists who launched many small rockets for atmospheric tests.

Bolton: Right. When did von Braun and his team and everyone realize that they were going to need to build a new test facility? How early did they start to realize that they were going to need a new test facility? It was built in the '60s. I was just wondering if it was years before that, or did this come up all of a sudden that they needed a new test facility?

Fortune: I'm trying to think of where I visited in Germany. Let me put it this way. The Germans were limited by the Treaty of Ghent. They could not supposedly do any military research and development in rocketry, but it just so happened they had packages that would carry three thousand pounds of mail. That's the way they developed their three-thousand-pound bomb.

Bolton: Mail carriers.

Fortune: Mail carriers.

Bolton: OK.

Fortune: And then they had sonar. Their underwater work was just beautifully—they had torpedoes that were faster than ours. They had underwater devices for seeing—oh, those are just for finding fish—and torpedoes, of course, and other submarines and stuff like that.

Bolton: So, even though there were a number of German scientist, including von Braun, that came over to this country, y'all were still working with a lot of German scientists that were back in Germany. Is that right?

Fortune: Yes, Peenemünde.

Bolton: OK. When did you first go down to the Hancock County area where the test facility was going to be built? When you first went down there, what were your first impressions of the area?

Fortune: We needed a barren, sparsely settled area. We had learned that the rocket firings for test purposes would shake buildings apart unless they were specially strengthened and designed. They learned that at Huntsville where they moved several—I remember walls. You could see the walls moving with all the vibration from the testing, the big motors and everything. And they realized that they couldn't do it at Huntsville. They had to have a remote, sparsely settled and specially designed.

Bolton: OK. I know that there was some talk about a NOVA rocket at the time, too. Was that a consideration in looking for a bigger testing area, this NOVA rocket that there were plans for?

Fortune: I'm trying to think when I was at White Sands. I visited White Sands frequently to keep up with progress there. NOVA was discussed. We had a national space study group. I remember having to make presentations to them for every time they wanted to develop a bigger step or a new fuel or a new propellant. [Rep. Les] Aspin was one of the more knowledgeable congressmen or senators that—let me see, when did I make presentations to him that time? He was one of the few people that would understand what I was talking about.

Bolton: Was that a problem, convincing the political people that this rocket program was needed?

Fortune: They did not perceive much of the necessity.

Bolton: What do you think changed their mind, kind of made them realize this was important?

Fortune: Well, when we launched the V-2 off the *Midway* was one of them. That was a great convincer for not only the congressional people, but a lot of the senior Navy people.

Bolton: OK. Saw how powerful that could be.

Fortune: Absolutely. And they all of a sudden realized that they had a bear by the tail.

Bolton: Let me just ask a few things about when you got down to Mississippi, and when you were working as manager of MTF. How did the landowners, the ones that had to leave their homes and everything, how did they deal with—

Fortune: They were very unhappy.

Bolton: Very unhappy.

Fortune: They had to move them out. They had to find them places. The Army Corps of Engineers handled the land purchase and transfers and so on. And they had to learn, as we did, to go along. We were caught between the rednecks and the NAACP.

Bolton: What do you mean by that?

Fortune: Well, one day I had to escort my wife—oh, the governor of Mississippi had a very sharp, smart capable aide, a black man. I think he was a lieutenant colonel or something on the governor's staff.

Bolton: There was a black man on the governor's staff at that point?

Fortune: Yes.

Bolton: OK.

Fortune: A black man. That amazed me. He was a very polished gentleman, and he escorted my wife on several occasions took her to the—oh, we had NAACP lined up on one side of the street, all the rednecks, all the unhappy whites on the other because we were seeming—I had 66 percent of my working force, to start with in Mississippi, was black. And I hired the senior warden, inside a Baptist church, as our field supervisor to take care of all the problems with the blacks. And he kept them contended; he kept them happy; he kept them working.

Bolton: Now, they wanted to make sure that they got their fair share of the jobs? Is that what the—

Fortune: No. They were hard getting educated. Well, we killed seventy-eight poisonous snakes the first day.

Bolton: Seventy-eight.

Fortune: Seventy-eight.

Bolton: This was your first day in Mississippi.

Fortune: First day we started clearing the work area.

Bolton: I'll bet the mosquitos were bad, too.

Fortune: You know the Spanish moss in the trees?

Bolton: Yes.

Fortune: Oh, they were horrible. I mean the mosquitos hung in those things. We counted something like a hundred and sixty mosquitos a minute landing on the field etymologist's shirt. He had a square on his blouse that he used to count one square foot as to how many mosquitos would land per minute. And I say it was phenomenal. And they would get under their burnooses they wore—just like in a desert. They kept their faces wrapped, their neck, their sleeves, their arms, wore thick fabric in order to keep the mosquitos from stinging through them. It was a continuing battle, and at one time they were going to walk off the job. I called the Air Force. I had a good, excellent liaison with the Air Force down there in Mississippi. "Could you come spray this area here for us?" I'm trying to recall—a young man who'd been working with the governor, a very sharp individual, and I put him in charge of contacting the Air Force for me. They came right in. They sprayed for a hundred miles around, around the total perimeter of the Mississippi Test Facility.

Bolton: Did that help?

Fortune: It sure did. Then all of a sudden people realized that we could do something about mosquitos. They'd always just assumed that that was a natural burden that we had to bear. It was a wonderful, happy result. Oh, by the way there was nine different poisonous varieties of snakes, including the coral snake.

Bolton: Which is very deadly.

Fortune: The most deadly of them all.

Bolton: Right.

Fortune: But there were different kinds of diamond back rattlers, cane break rattlers, moccasins, both water, adders. We kept one exhibit in a cage for all the workers to see so they would know what the snakes were and which were poisonous and what to avoid and so forth.

Bolton: It sounds like quite a job.

Fortune: It never lost its interest at one accounting to another.

Bolton: Just going back a little bit to the people that were there that you said were angry. How did you as the manager deal with trying to get them to accept what was happening?

Fortune: It wasn't easy. For example we had one ward supervisor, Boogie Dean, and he was a boogie man. Not only did he scare all the blacks, but a lot of poor whites were afraid of him. And fortunately for me, Boogie had a sense of humor and could see the light after I would explain it. "Now, Boogie, this is the way we're going to have to do it." Now, for example he built a lot of roads in there, and then looked to him like the Corps of Engineers wasn't going to pay him for them. And his roads were breaking down because of all the heavy earth movers and everything

that was coming on going over them. And he'd come in and cry about them. I'd say, "Well now, Boogie, you just take it easy. I'll get you paid for that. It's going to take a bit of doing, but we'll do it. And another thing, if you don't do it my way, the way that this is going to get past all the politicos and the governor and so on. You won't get paid unless you do it the way where we can help you and us both at the same time. Boogie, I'll wrestle you for it, just to show you how serious I am." He says, "Cap, I could throw you from here to Logtown ten miles away. However, you're the one guy I've talked to so far that seems to know what he's doing and does what he says." And I said, "Thank you, Boogie. My God, it's been hard, but we got there."

Bolton: That's a good story.

Fortune: I appreciated it.

Bolton: Do you go out into the community to talk to other people in the community?

Fortune: Oh, I made trips all around the state, up state, down state. We moved everything by water, you know. Barge and so on. And so I first learned all of the waterways and decided what we should do in order to get our big stages down from Huntsville into MTF and then from MTF over to the launch pad at Canaveral.

Bolton: That sounds like public relations was a big part of your job, then, in those early days.

Fortune: Oh, absolutely, completely.

Bolton: OK. I know one of your first hires was Mack Herring as public relations officer. He said that you recruited him from Huntsville to come down to MTF.

Fortune: Well, I went to Bart Slattery, who was the chief of that area, that division. "Bart," I said, "it's going to take a very special guy to do this. And you know your people better than I do. Whom would you recommend?"

Hmmm. "Mack Herring, I think, think has enough sense of reality and human elements on handle to handle people and convince them to get them to work together with you and with von Braun and so forth." And he turned out to be a perfect help. You couldn't ask for anybody better. Even Bart Slattery said he was sorry to let him go.

Bolton: His loss and your gain.

Fortune: Right.

Bolton: What was the most difficult problem that you faced in trying to actually turn this place from, basically, a wilderness into a viable test facility?

Fortune: I had to get some of the Germans to realize they couldn't just tell another German what to do. They had to convince the poor backwoods people, the politicians, the local scientists around. They had to show them that they weren't going to be hurt by all the rumblings and the shakings, unusual events. One of my fortés with Wernher was that he sent some of the Germans up to Washington to NASA headquarters and so on, and they couldn't convince the people there that that was what they should. And I was just lucky that I had known a lot of these people before and worked with them, and they would listen to me. And that helped a great deal. And I also had a lot of good friends in

industry that learned to work with—Gene Root, for example, from Lockheed was one of my helpers. Eugene Root, as it was.

Bolton: Root, that's R-O—

Fortune: R-O-O-T.

Bolton: OK.

Fortune: And I was lucky, Chuck, in that I had been first a BUAER [Bureau of Aeronautics] representative at AeroJet, and, in fact, I had many good friends at AeroJet. I launched an Aerobee off a ship in the Arctic.

Bolton: Captain Fortune, let me interrupt a second. I need to turn the tape over.

(Brief interruption. The interview continues on tape one, side two.)

Bolton: Go right ahead.

Fortune: Dan Kimball, who was one of AeroJet's vice presidents, always helped me. Whenever I had some sort of an industry or rocket problem and didn't know who to go to, I'd go to Dan or to Art Rude, his vice president.

Bolton: So you were having to work with a lot of different people to bring this all together in other words.

Fortune: Bill Gore, Al Gore's brother—well, Bill helped me convince a lot of the fleet on putting JATO, the Jet-Assist Take Off rockets on aircraft. And he even came down for me one time and put a rocket on to get a PBY [seaplane that had a forced landing] off the desert, to lift it off, because they couldn't take it off, you see, on the sand. And so they put a large enough JATO to get it into the air. Of course, once it was in the air, it was simple. And Bill, on another occasion, burned his tail off in some short fighter plane. And fortunately, it was close enough to the ground that he could get out safely because he would have been burned up if he had had to put it down as fast as it was going. So I've had a lot of help all along the way.

Bolton: Would you say that the job being the first manager of the MTF was a difficult job compared to other jobs that you had?

Fortune: I say it's the most difficult job I ever had.

Bolton: Oh, OK.

Fortune: You never know where some new and unforeseen problem would come from, either political or personnel, different cults, different beliefs. I guess one of the lessons I had was at Lakehurst, and there were backward people there, some of whom were not complete educated. And trying to convince some people what is right is right takes a lot of persuasion and calm. You can't blow up. You have to explain and explain and explain. Finally, they begin to see the light. Those rednecks, they were something.

Bolton: Could you see the place, over the time you were there, developing into something though from —

Fortune: Oh, definitely. I hated to leave my headquarters down there. What did we call it?

Bolton: The Rouchon House.

Fortune: Paradise Lost.

Bolton: Oh, OK. You were located in the Rouchon House right? Is that where your offices were?

Fortune: Yes.

Bolton: Paradise Lost.

Fortune: Paradise Lost. And everytime, if I wasn't careful, I'd go out the front door to get a breath of fresh air or to see what was going on over there, and a boar would come charging at me with long tuskers. And I had to get something high to get up on or get up a tree or get behind something.

Bolton: Did that happen to you frequently?

Fortune: About once a day.

Bolton: Really? I guess because people still ran their livestock on the open range.

Fortune: They were still developing their little scrub cattle and their scrub farms. They were pretty primitive back in there.

Bolton: Could you see a change come about in the local communities in the area because of the development of this facility?

Fortune: Definitely. Their schools improved. And, incidentally, I worked with Mississippi [State University, Dr. Raspet].

Bolton: This is while you were manager?

Fortune: Yes, and before. I had worked with them, MSU, when I was at the naval aircraft factory. Now what was I doing? Why was I working with them? Oh, boundary layer control.

Bolton: What's that?

Fortune: Boundary layer control. A Mississippi State professor did a lot of primary studies and developed how the air flow over wings could be utilized to give greater lift or speed. And so—

Bolton: Is this at Mississippi State or Mississippi Southern?

Fortune: Mississippi State.

Bolton: OK. So, you could see a lot of change come about in the communities over the time you were there?

Fortune: Definitely. They learned how to develop, grow, and so forth.

Bolton: Did you live in one of the communities in the area? Where did you live in the time you were working down at the Mississippi Test Facility? Did you live in Picayune or Slidell or the Gulf Coast?

Fortune: Where did we live in Mississippi? What was the city, the town?

Mrs. Weaver: Pass Christian.

Fortune: You know, all of a sudden, I drew a blank. Pass Christian.

Bolton: Pass Christian, OK. So down on the Gulf Coast.

Fortune: Right.

Bolton: OK.

Fortune: A wonderful place.

Bolton: OK. Well, I know you've got to go, and I've been talking to you for quite a while. I just want to ask if there's anything else that you wanted to add that I haven't asked you, about either your time at the Mississippi Test Facility or about something earlier in your career. I know you've had a long career.

Fortune: Well, Chuck, you send me the transcript.

Bolton: I will.

Fortune: And then let me—

Bolton: It'll be about three weeks before I have a transcript.

Fortune: OK. And decide what I think the high points should be, where it should need more

emphasis.

Bolton: OK, and maybe we can talk again if we need to.

Fortune: I would appreciate it.

Bolton: OK.

Fortune: Matter of fact, you give me about—well, after you've sent it to me, give me a week or

two.

Bolton: OK.

Fortune: And I would love to go over it then and see what I've missed.

Bolton: OK. I'm going to go ahead and stop the tape recorder here.

(end of the interview)